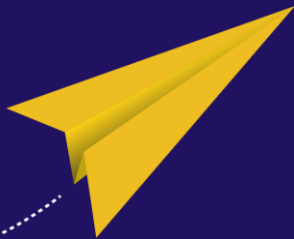


Intelligent Forecasting.

Demand planning
Retail & manufacturing businesses

Index.

1. Current challenges of retail and manufacturing
2. Nubiral Smart Forecasting Solution
3. Success Stories
4. Nubiral Methodology
5. About Us



Retail & manufacturing.

Main challenges.

Scale problems

High number of items and stores to predict sales and logistics.

Intermittent demand:

Slow and erratic sales of varied products in stores and distribution.

Product pricing and promotional activity.

Fluctuations bring problems of inventory, backorders and expiration.

Instability in the classification

Frequent entry of new products and product changes by seasonality.

Retail and manufacturing **challenges.**

Forecast error

Understanding and predicting demand is essential to avoid stock-outs and expired inventory in order to maintain an adequate level of inventory.

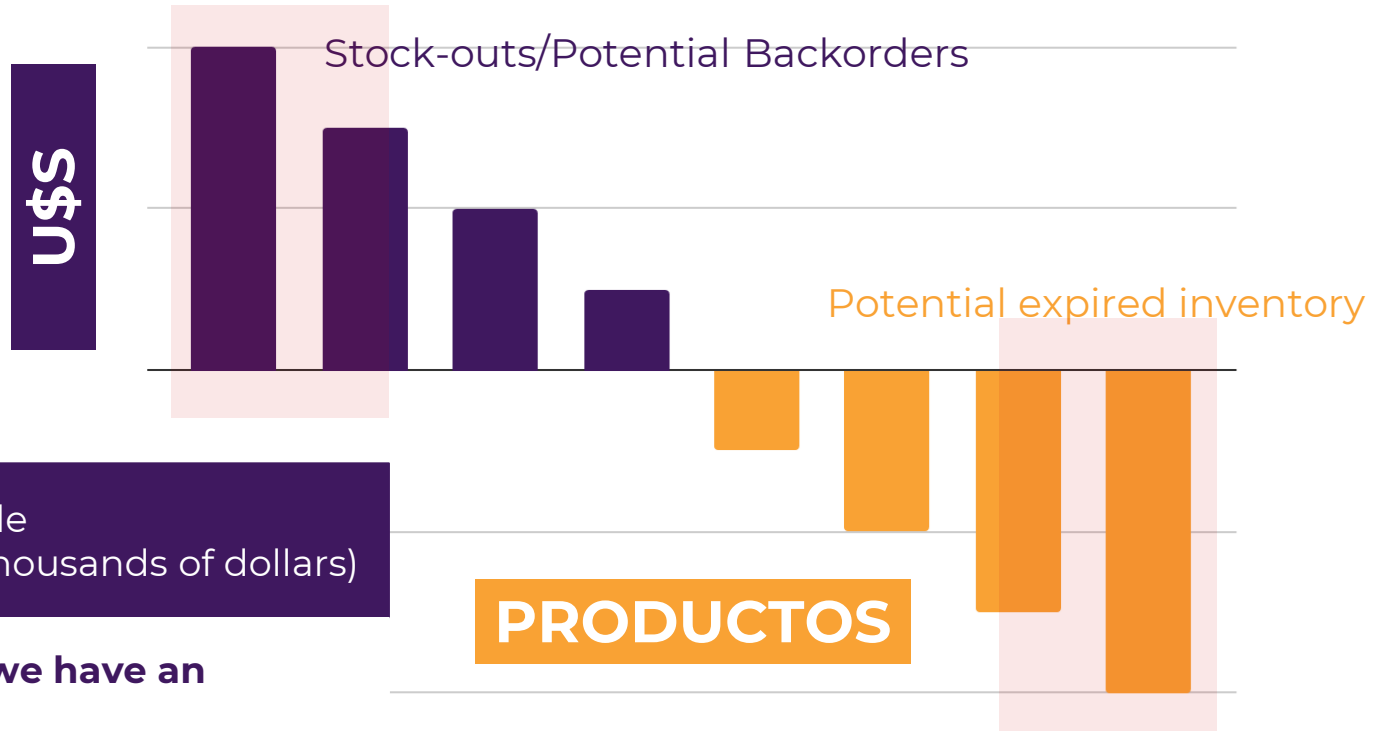
Forecast Error			
	>50%	+/-40%	FE Target <40%

Many companies do not have procedures to measure forecast error and calculating it may be a complex process. It takes many days and has an important difference between Forecast and Actuals. Sellers, planners, and managers do not have the right decision-making tools.

"He who lives looking at the crystal ball soon learns to eat glass"

Edgar R. Fiedler in The Three Rs of Economic Forecasting-Irrational, Irrelevant and Irreverent

Retail and manufacturing **challenges.**



Sales / Forecast Example
Variation by product (thousands of dollars)

What happens when we have an imprecise forecast?

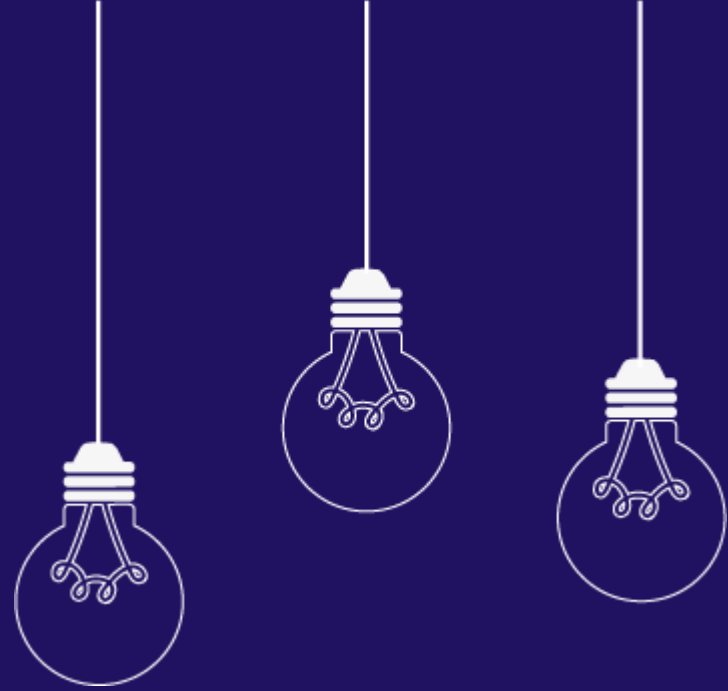
We will have future inventory issues due to lack of forecasting accuracy.

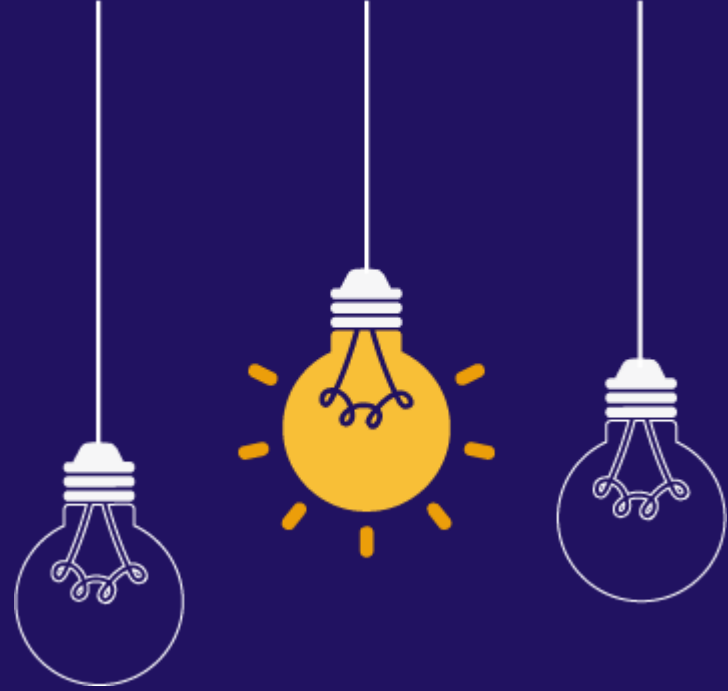
Retail and manufacturing **challenges.**



Fluctuations bring expired inventory and backorders.

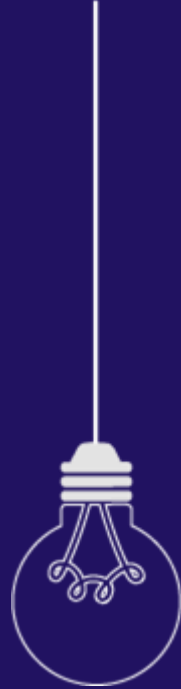
¿**The solution** to
these challenges?





Intelligent
Forecasting.

Intelligent Forecasting.



Artificial intelligence solution that allows the forecasting of business events in advance in order to plan improvements and actions that optimize results and meet the proposed objectives.

It uses **Machine Learning** algorithms to learn from the data obtained and perform inventory savings by reducing forecast errors by up to 25%.

Intelligent Forecasting.



Furthermore, as a result of the reduction of the safety stock, **thousands of dollars are saved.**

This solution applies to **inventory, storage and distribution** within industries such as retail, supply chain, and manufacturing.

Intelligent Forecasting

- **Key benefits to be successful.**

Artificial Intelligence Solution.
Expected results.

Expand client portfolio with more accurate inventory stock rates.

Increase revenue, flexibility and inventory variety with reduced or predictable levels of safety stock.

Shift the business focus to strategic planning and collaboration to boost operations with highly predictive forecasting.

Intelligent Forecasting



Key benefits to
be successful.

Artificial Intelligence Solution.

Expected results.

Recurring patterns of demand

Recurring variations in demand caused, for example, during business days, holidays or seasonality.

Business Decisions

The impact of promotions (including cannibalization and halo effect) price change and changes in how products are offered.

External Factors

The impact of factors not controlled by the business, such as weather, local events and customer desires.

Unknown factors

Changes in demand not contemplated in the past, such as pandemics, openings of competitors in the vicinity, unexpected high mass events (protests).

Intelligent Forecasting



Key benefits to
be successful,
Artificial intelligence Solution.
Expected results.

Decrease the
safety stock
up to 10%.

Reduce forecast error
up to 25%.

Significant annual
savings as a result of
automated and
intelligent
operations.



1. Creation of a **dynamic forecast** by SKU, region and market to show the differences in inventory forecasts.

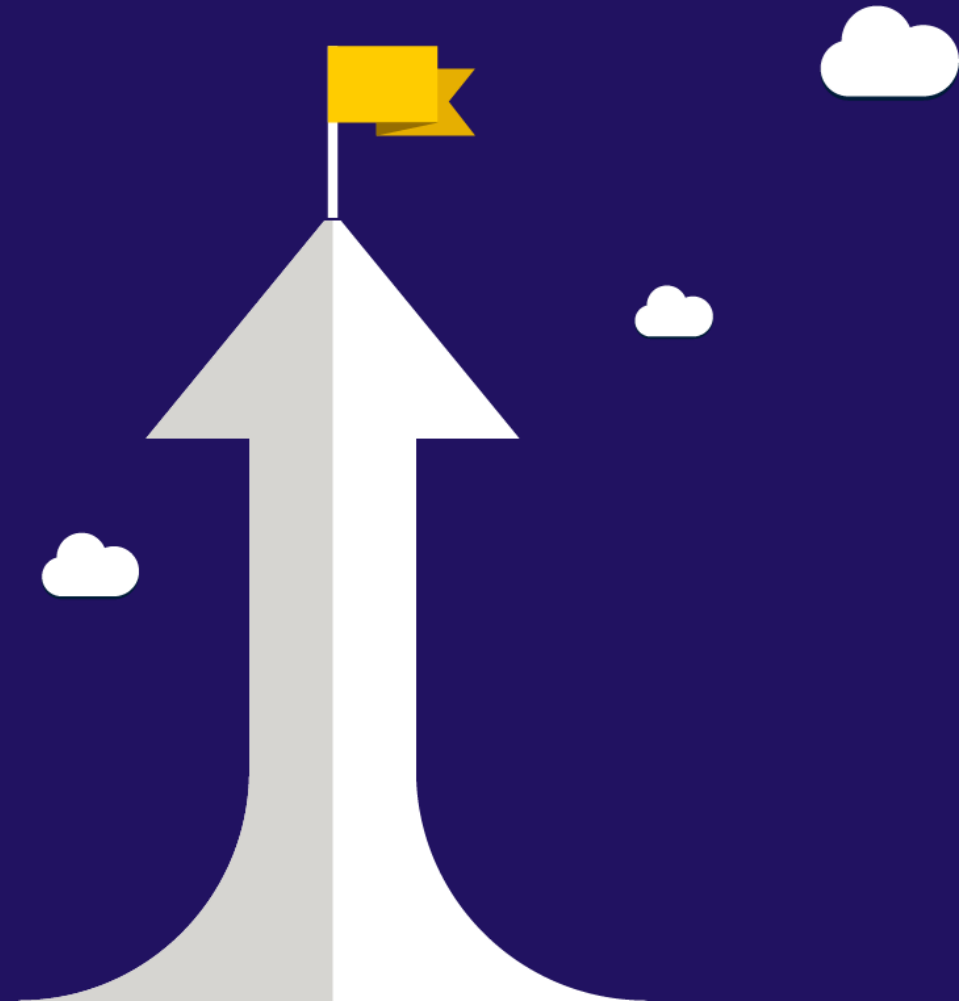
2. **Visualization and comparison** of the statistical forecast versus the market forecast, the scale of cancellation and improvement with variables taken from the market.

3. Enabling the use of the **segmentation** tool for SKU review to minimize the frequency of deviations.

4. **Dissemination of data** to regional leaders to drive the use of statistical forecasting and set standards in SKU segmentation.

¿How does
it work?

Success
stories.





Client

Important manufacturing company with a global presence and more than 20 plants operating in the world. Operations in the supply chain.

Client needs

Data analysis through the use of statistical forecasting and establishing standards in the segmentation of SKUs.

Main benefits

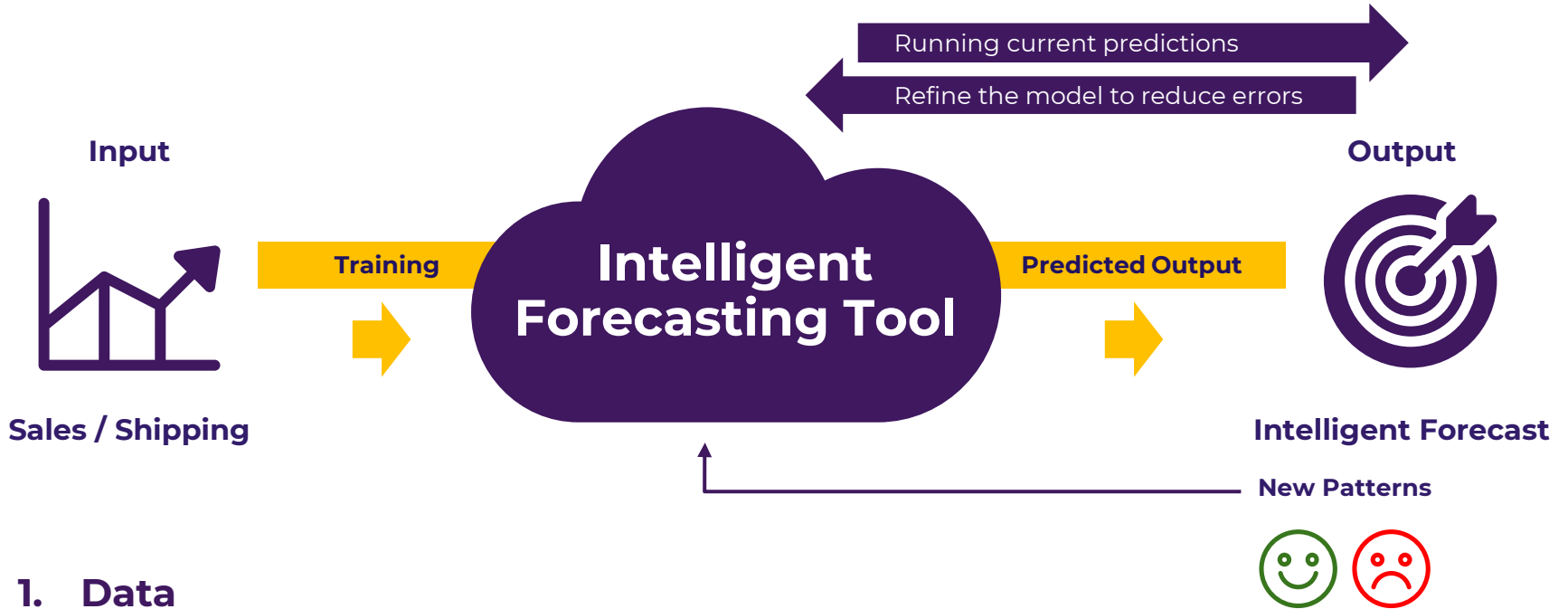
Strong governance process that ensures alignment between markets and improves the efficient distribution of inventories versus demand.

Intelligent
Forecasting.

Nubiral
Methodology.

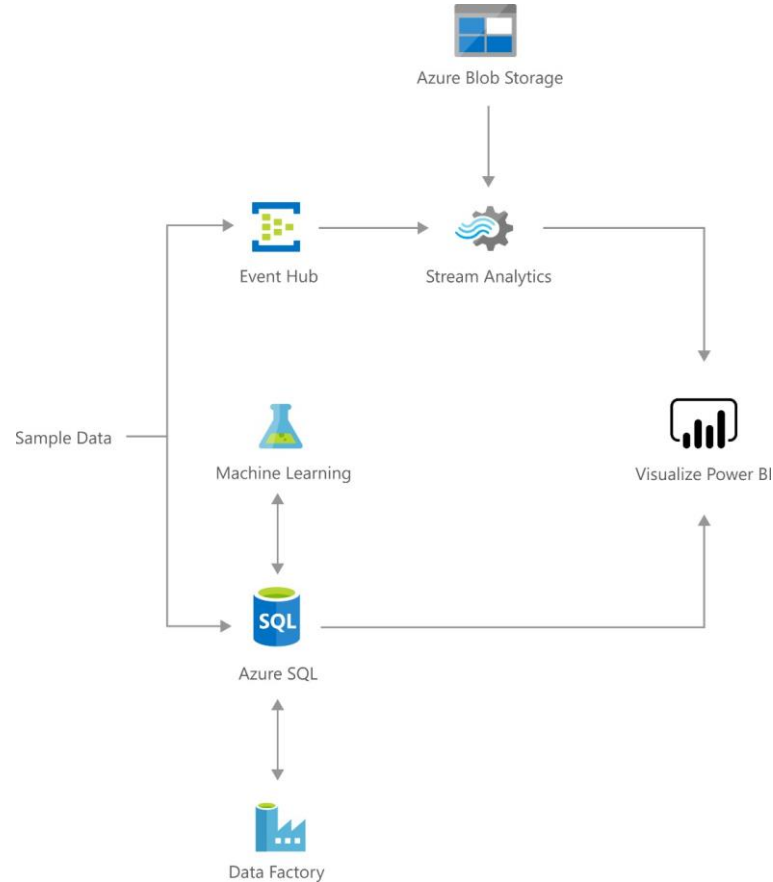


Nubiral work methodology.



1. Data
2. Model
3. Feedback

Nubiral intelligent forecasting. **Azure**



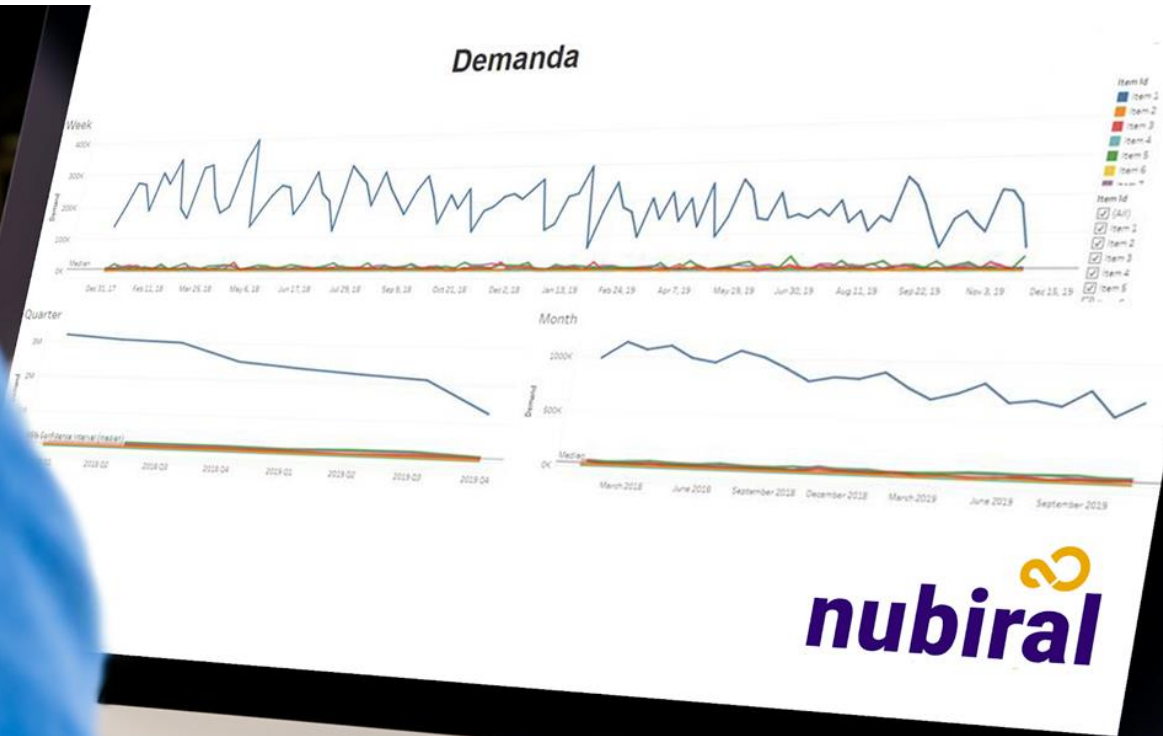
Nubiral intelligent forecasting. **Dashboards**



Nubiral intelligent forecasting. **Dashboards**



Nubiral intelligent forecasting. **Dashboards**



<https://public.tableau.com/profile/sergio.mastrogiovanni#!/vizhome/IntelligentForecast/ForecastError?publish=yes>

About

Us



Nubiral in **Numbers.**

+10
years

designing, implementing
and managing disruptive
technological solutions and
professional services.

+100
clients

in multiple industries:
Automotive, Energy, Telcos,
Media, Oil & Gas, Retail,
Health, Transportation and
Logistics.

+4
offices

around the world in
Argentina, Mexico,
Uruguay and the United
States.



Nubiral in **Numbers.**

+60
team
members

with extensive industry
knowledge and the highest
technological expertise.

+80
% certified
staff

always keeping ourselves
updated with the latest
technologies.



What makes us **unique.**



We promote the culture of data and innovation in business processes.

We develop customized workshops and diagnostics, made up of multidisciplinary teams between the client and our specialists with the aim of capturing business needs and opportunities for improvement.

End to end projects.

We participate in the value generation process from the diagnosis of each client's situation to the monitoring and accompaniment throughout the digital transformation procedure.

We are strategic allies of your business.

Our team is made up of professionals who are deeply involved in each project. This is why we are not only a solution provider, but also a business partner that create value in every company that chooses us.

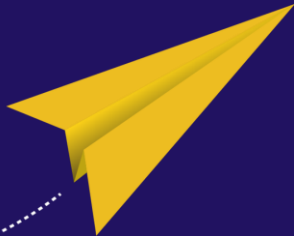
Availability and global presence.

Our multidisciplinary staff is available 24/7 for our clients.

What makes us **unique.**



Why Nubiral?



Experience in multiple industries to boost your business.

Multidisciplinary team, certified and with vast experience in the field.

Customized technology solutions to accompany organizations to be more agile, efficient and innovative.

Young, pro-innovation and customer-oriented culture.

Nerds 24/7!

Passionate about technology. We create value in each of the organizations that choose us.

INNOVATE WITH US!

